Inspired technologies
Bringing breath to life.

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300P-LT07 REV 0

VIAspire™ Oxygen Portables

300 and 600 Product Manual

CAUTION
Federal (USA) law restricts this device to sale by or on the order of a physician.

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Welcome!

Welcome to the VIAspire™ Personal Oxygen System from Inspired Technologies. The VIAspire™ Liquefier creates a steady supply of liquid oxygen in your home, making deliveries of oxygen to your home no longer necessary. By docking the VIAspire™ Oxygen Portables, you can fill and transport your liquid oxygen quickly and easily, letting you use the portable for your daily oxygen needs. You no longer need to run oxygen tubing through your house, and you are free to go wherever your day may take you. This manual is for the VIAspire™ Oxygen Portables 300 and 600.

Before You Begin

Please read this entire manual before you use your VIAspire Liquid Oxygen Portables 300 and/or 600. If you are unable to understand the warnings, cautions, and instructions, contact your medical equipment provider before using this equipment. Otherwise, injury or damage to the equipment may occur.

When using electrical and oxygen products, especially when children are present, you must follow some important safety precautions. Please read the following before you start using your VIAspire Portable.

Product Classification

The VIAspire Liquid Oxygen Portable is classified as:

IEC Class II equipment

Type B Applied Part

Not suitable for use in the presence of a flammable anesthetic mixture with air, or with nitrous oxide.

Terms, Abbreviations, and Symbols

This guide and the VIAspire Portable product labeling uses the following terms, abbreviations, and symbols:

IEC Symbols

	Smoking is not allowed in the area	**REF**	Indicates a Model Number
	General warning sign	**SN**	Indicates a Serial Number
	Class II Equipment	**LOX**	Indicates Liquid Oxygen
	Type B Equipment		Follow Operating Instructions
	Warning: dangerous voltage		Fire Hazard

Important Safeguards

When using electrical products, especially when children are present, basic safety precautions should always be followed. Read all instructions before using. Important information is highlighted by these terms:

DANGER	Urgent safety information for hazards that will cause serious injury or death.	**CAUTION**	Information for preventing damage to the product.
WARNING	Important safety information for hazards that might cause serious injury.	**NOTE**	Information to which you should pay special attention.

Important safeguards are indicated throughout this guide; pay special attention to all safety information.

Read all instructions before using. Save these instructions.

General Dangers and Warnings

In order to ensure the safe installation, assembly, and operation of the VIAspire Liquid Oxygen Portable, these instructions MUST be followed.

Dangers

DANGER

Fire hazard. Do not lubricate. Do not allow grease or oil from your hands or other source to come into contact with the internal tubing of the VIAspire Liquid Oxygen Portable. These solutions may be flammable and cause injury.

DANGER

Oxygen causes rapid burning. Do not smoke in the vicinity of your VIAspire Liquid Oxygen Portable or when you are near a person utilizing oxygen therapy. Keep the VIAspire Liquid Oxygen Portable at least 5 feet (1.6M) from hot, sparking objects or open sources of flame.

DANGER

Do not lay the cannula down. Do not lay the cannula down while the oxygen is flowing. High concentrations of oxygen can cause rapid burning.

Warnings

WARNING

Read instruction manual first. Do not install, assemble, or operate this equipment without first reading and understanding this instruction manual and the warning labels on the product. If you are unable to understand the warnings, cautions and instructions, contact your medical equipment provider or technical personnel if applicable before attempting to install or use this equipment; otherwise, injury or damage may occur.

WARNING

Liquid Oxygen used ONLY by patient. The use of this device is limited to an oxygen patient. Liquid oxygen MUST be used ONLY by an oxygen patient and is not intended to be distributed to any other individual for any purpose.

WARNING **Use only authorized parts.** Do not use parts, accessories, or adapters other than those authorized by Inspired Technologies, Inc.

WARNING **Do not use if...**

Do not use the VIAspire Portable 300 or 600 if it:

- Is not working properly.
- Has been dropped or damaged.
- Has been submersed in water.

Call a qualified technician for examination and repair.

WARNING **Unintended oxygen leakage.** If any unintended leakage of oxygen is detected, do not attempt to use the product. Turn the product off. If leakage persists, place the product outdoors and notify your Home Health Care Provider or Service Representative of this condition.

WARNING **High pressure relief valves.** The VIAspire Liquid Oxygen Portable is equipped with several High Pressure Relief Valves to ensure the user's safety. When activated, this safety feature will make a loud noise. If this noise occurs and persists, turn the unit off and contact your Home Health Care Provider or Service Representative.

WARNING **Always supervise children.** Children should always be supervised around the VIAspire Liquid Oxygen Portable. Failure to do so may result in damage to the unit or personal injury.

WARNING **Use in accordance with your prescription.** For your safety, the VIAspire Liquid Oxygen Portable must be used in accordance with the prescription determined by your physician.

WARNING **Seek medical advice before using oxygen.** Under certain circumstances, oxygen therapy can be hazardous. Seeking medical advice before using oxygen is advisable.

Warnings About Handling

WARNING **Use extreme care when filling.** Use extreme care when filling your VIAspire Liquid Oxygen Portable.

WARNING **Keep unit is in an upright position.** Always ensure that the portable is in an upright position. Turning the portable on its side will cause venting of oxygen from the relief valves.

Cautions and Notes

CAUTION **Do not disassemble.** The VIAspire Liquid Oxygen Portable contains no user serviceable parts. If service is required, contact your home medical equipment provider or authorized service center.

CAUTION **Use only AA Alkaline type batteries.** Only use AA Alkaline type batteries. Inspired Technologies does not recommend use of rechargeable batteries.

CAUTION **Federal law restricts** this device to sale by or on order of a physician.

WARNING **Not for use in emergency transport vehicles.** The VIAspire Liquid Oxygen Portable is not intended to be used in emergency transport vehicles (ambulances or helicopters), or other similar areas where high levels of Electromagnetic Interference (EMI) may be expected.

NOTE **Have a full cylinder of oxygen on hand.** Inspired Technologies recommends the medical equipment provider leaving a full cylinder of oxygen with the patient after setting up the VIAspire Portable, and instructing the patient to always keep a full cylinder on hand.

NOTE **Allow portable to rest for at least ½ hour after filling.** Inspired Technologies recommends that the VIAspire Portable be allowed to rest for at least ½ hour after filling prior to being used. This allow the LOX to vaporize in the inner container and you will be able to better maintain your prescription flow setting.

Indications for Use

The Model 300P and/or 600P Liquid Oxygen Portable will provide a source of supplemental oxygen for ambulatory home healthcare patients, by vaporizing medical grade liquid oxygen and then dispensing it to the patient via an integral electronic conserving device. The Model 300P and/or 600P Liquid Oxygen Portable is neither a life-sustaining nor a life-supporting device.

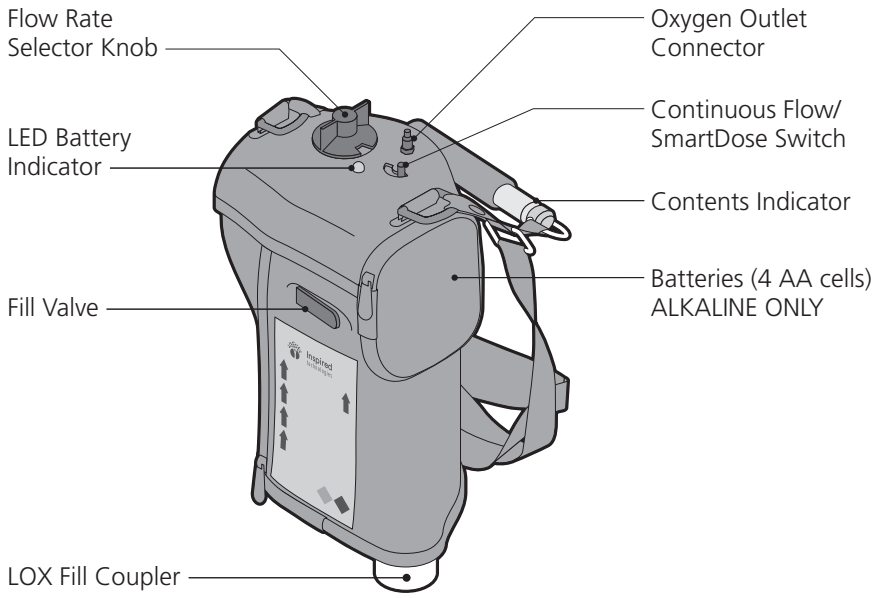
Provider Checklist

Before leaving the VIAspire Liquid Oxygen Portable with a patient, the following checklist MUST be completed:

- ☐ Check all parts for shipping damage. In case of damage, do not use. Contact Inspired Technologies, Inc. for further instructions.
- ☐ Make sure the VIAspire Liquid Oxygen Portable is compatible with the liquid oxygen source. Use a liquid oxygen reservoir with a compatible coupler.
- ☐ Instruct the patient on the safe operation of the VIAspire Liquid Oxygen Portable and all associated accessories, and review ALL warnings.
- ☐ Leave a copy of this instruction guide with the patient.

VIAspire Portable Overview

The illustration shows the parts of the VIAspire Portable.



Filling a VIAspire Portable 300 or 600

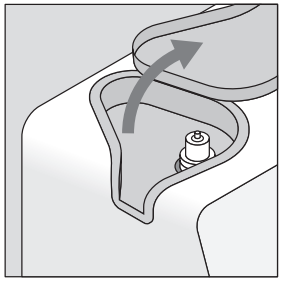
After the VIAspire Liquefier has liquefied enough oxygen, you can fill your portable by following these instructions.

WARNING If the Liquid Oxygen Coupler Access Door on top of the VIAspire Liquefier is opened and the unit continues to run, do not fill the portable. Contact your medical equipment provider to service the equipment.

CAUTION The VIAspire Portable is designed to accept 93% pure liquid oxygen from the VIAspire Liquefier. Most oxygen portables are not compatible. Attempting to use an incompatible portable device may damage the VIAspire Portable or Liquefier, or could lead to injury.

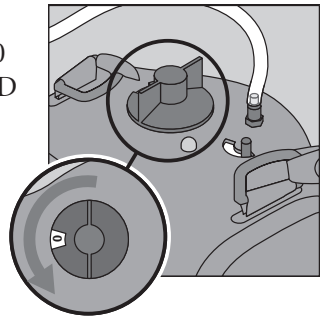
Instructions

1 Open the Liquid Oxygen Coupler Access Door on the top of the VIAspire Liquefier. This will stop the liquefication process.

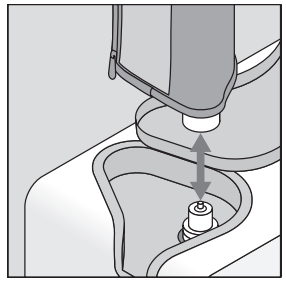


Use a clean, dry, oil-free, lint-free cloth to clean and dry the couplers on both units.

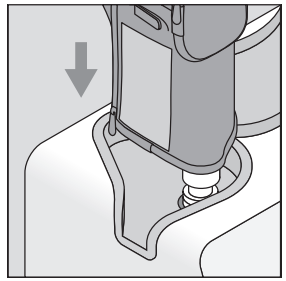
2 On the VIAspire Portable, turn the Patient Flow Indicator to the 0 position and assure that the CF/SD switch is in the "SD" position.



3 Align the coupler on the bottom of the VIAspire Portable with the coupler in the dock area on top of the Liquefier.

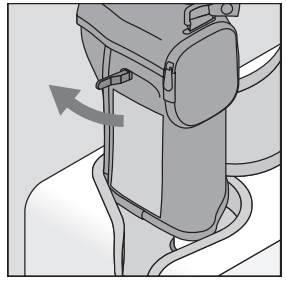


4 Press firmly on the top of the VIAspire Portable, keeping it in an upright position. The VIAspire Liquefier and Portable are now connected.



5 Open the Vent Valve on the VIAspire Portable to begin filling the portable.

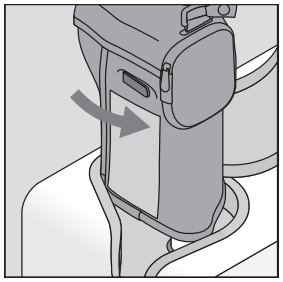
Hold down the VIAspire Portable in place throughout the filling process.



NOTE The hissing sound you hear is the sound of some oxygen escaping; this is normal.

NOTE You may see vapor around the connection. This is normal and due to the great difference in temperatures between the liquid oxygen and the warm air surrounding the VIAspire Portable.

6 When the portable is full, close the valve. You will know that it is full when the hissing sound changes tone, and some liquid comes out of the vent line.



7 Lift the portable off of the VIAspire Liquefier.

If the portable does not separate easily, do not use force. The VIAspire Liquefier and Portable may be frozen together, which sometimes occurs. A slight twisting motion will release them.

- Wait until the units warm up for 3 to 5 minutes, and then they will separate with slight effort.
- Do not touch any frosted parts.
- If any liquid is leaking from the liquefier reservoir or the VIAspire Portable after separation, reattach the portable immediately, then separate the units again.
- If liquid continues to leak, leave the units connected and call your medical equipment provider.

8 Close the Coupler Access Door. After a short period of time, the VIAspire Liquefier will begin liquefying to replenish the liquid oxygen level.

WARNING Should any excessive leakage occur, to the point that a stream of liquid is present, leave the area and call your medical equipment provider immediately.

WARNING Liquid or cold gaseous oxygen can cause frostbite on the skin. Oxygen will result in increased fire hazard.

NOTE For additional information and instructions on proper use of your VIAspire Liquefier, refer to the user guide that came with it.

Selecting the Oxygen Delivery Mode

The VIAspire Portables 300 and 600 automatically dose in two modes of pulsed oxygen delivery as well as continuous flow modes.

When you are resting and your breath rate is slower, the VIAspire Portable 300 and/or 600 are designed to deliver oxygen at the lowest flow rate possible. This minimizes nasal dryness and also results in quieter therapy. If you notice a change in the velocity of oxygen on each breath, or a quieter delivery of oxygen, you have probably slowed down your breathing pattern and the SmartDose Technology has adjusted the flow of oxygen to the appropriate level.

Sport Delivery Mode with SmartDose technology

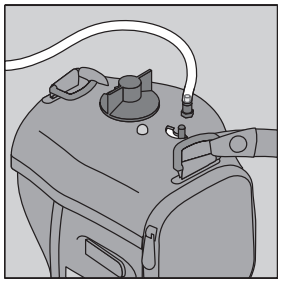
The VIAspire Portables 300 and 600 have SmartDose technology, which will track your breath rate to determine if you are exerting more energy and therefore may need additional oxygen. When you are at rest, the VIAspire Portables 300 and 600 will deliver a resting volume of oxygen. As you begin to exert, your breath rate will climb, and the portable will deliver additional oxygen.

While many oxygen portables require the patient to turn the oxygen flow rate selector knob up and down as they move and rest, the VIAspire Portables 300 and 600 will adjust oxygen volumes to your needs automatically.

Starting Oxygen Delivery from the VIAspire Portable

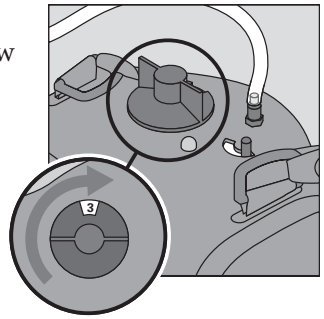
To receive oxygen from your VIAspire Portable, follow these steps.

1 Push the cannula breathing tube firmly onto the oxygen outlet port.



2 Adjust the cannula breathing tube to the proper position so that you will be able to breathe the oxygen comfortably.

3 Turn the flow rate selection knob clockwise until the prescribed flow rate (from 0 to 5) appears in the window. Assure that the CF/SD switch is in the "SD" position.



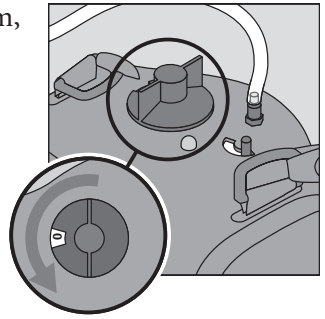
4 With each breath, you should now be receiving a set dosage of gaseous oxygen.

- The green LED battery indicator will light up with each breath, signaling that the VIAspire Portable is being triggered to deliver oxygen. The LED monitors only battery power and does not indicate level of liquid oxygen available in reservoir.
- When it is time to replace the batteries, the red LED battery indicator will light up with each breath. The red LED battery indicator will be lit solid (not blinking with each breath) if the batteries are totally depleted.

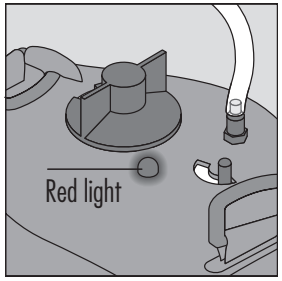
NOTE When the red LED indicator lights up, replace the batteries as soon as possible or switch to continuous flow by changing the CF/SD (Continuous Flow/ SmartDose) switch to the CF setting. Continuous Flow mode does not require batteries.

NOTE The green LED battery indicator will light up with each breath, regardless of the liquid oxygen contents, even if the portable has no liquid oxygen left.

5 To stop the oxygen delivery system, turn the flow rate selection knob counter-clockwise back to the off (0) position.



Monitoring Battery Power



The VIAspire Oxygen Portables 300 and 600 are each powered by four AA alkaline batteries. A blinking red light on the LED means it is time to replace the batteries. If this happens, replace the batteries or switch to continuous flow by changing the CF/SD (Continuous Flow/ SmartDose Delivery) switch to the CF setting. Continuous Flow mode does not require batteries and the VIAspire Portable will now deliver a continuous flow of oxygen.

If the indicator displays a non-blinking (solid) red light, this means the batteries are dead and no oxygen is being delivered in SmartDose mode.

WARNING Using the VIAspire Portable 300 or 600 in continuous flow (CF) mode will use up oxygen at a faster rate. Monitor the contents indicator as described under "Checking the Level of Liquid Oxygen" to be sure that you do not run out of oxygen.

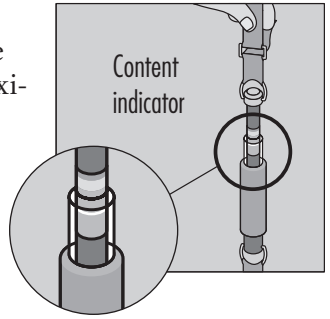
NOTE When using the VIAspire Portable in continuous flow (CF) mode, the LED indicator will NOT light up green or red with each breath. Turning the flow selector knob to zero will not affect the flow. Turn the CF/SD switch to "SD" mode to stop flow.

Checking the Level of Liquid Oxygen

The VIAspire Portable has a built-in tool to check the amount of liquid oxygen. Follow these steps for using the Content Indicator.

1 Hold the short strap directly above the black Content Indicator spring scale chamber on the portable as shown below.

2 Let the portable stabilize (do not bounce or shake it), then read the exposed color scale for the approximate amount of liquid oxygen.



NOTE If the portable is empty, only the red colored band of the scale will be exposed. In this case, you need to fill the portable before you can use it.

Troubleshooting

The following troubleshooting chart will help you analyze and correct minor system malfunctions. If the suggested procedures do not help, call your medical equipment provider. Do not attempt any other maintenance.

WARNING To avoid electric shock hazard, do not remove the portable case. The case should only be removed by a qualified technician.

Problem	Solution
No indicator lights	• Check that there are new batteries in the unit (four AA-Alkaline Batteries). • Check that the cannula tubing is properly connected and that the tube is not blocked. • Check that the CF/SD switch is in the SD (SmartDose) position.

Cleaning and Maintenance

Removing Frost

Under certain environmental conditions, frost may form on the vaporizer coil and on the case. You can remove it by tapping the portable or wiping the case.

After allowing the portable to warm to room temperature, unzip the bottom and remove the condensation pad. Wring out and allow it to dry thoroughly before replacing.

Preventative Maintenance

Contact your medical equipment provider annually to schedule preventative maintenance for the VIAspire Portable 300 or 600. There are no user-serviceable components inside the portable (with the exception of the condensation pad).

Keep the exterior of the VIAspire Portable 300 or 600 clean using a clean, damp, oil-free, lint-free cloth.

Clean and dry the couplers on both the VIAspire Liquefier reservoir and the VIAspire Portable 300 or 600 with a clean, dry, oil-free, lint-free cloth before each portable fill.

Accessories

Inspired Technologies recommends using only cannula specifically intended to be used with Oxygen delivery systems. Cannula should be capable of delivering up to 8 LPM of continuous flow; maximum length that can be used is 10 meters (35 ft.). Contact your homecare dealer for recommendations and details. Refer to the cannula manufacturer's instructions for proper cleaning and maintenance procedures.

Transporting & Storing VIAspire Portables

Preparing for Shipping

Prior to shipping the VIAspire Portable 300 or 600, remove the batteries and empty any residual oxygen from the unit. Allow the portable to sit for at least 8 hours to allow it to empty.

Storage

Store the VIAspire Portable 300 or 600 in a cool, clean, dry area when not in use. Avoid storing in direct sunlight.

Battery disposal

Dispose of all alkaline batteries in accordance with local, state, and federal regulations.

Specifications

Batteries Required	4 AA-Cell (alkaline only)	
Oxygen Pressure	22 – 25 psig	
LOX Content Volume	Model 300 Model 600	0.33 liters (approx) 0.6 liters (approx)
Weight (empty)	Model 300 Model 600	3.5 lb 4.5 lb
Temperature	Storage/Transport Operating	-20 to 50°C + 5 to 40°C
Humidity (non-condensing)	Storage Operating	0 to 95% RH, 15 to 95% RH,

VIAspire™ Oxygen Portables
300 and 600 Product Manual Insert

This insert applies to the use of the 300 and 600 Liquid Oxygen Portable with PB coupler.

The VIAspire 300 and 600 Liquid Oxygen Portable with SmartDose technology is also available with a PB coupler suitable for use with liquid oxygen (LOX) systems which have a male PB Coupler (100% LOX). These portables with a PB coupler cannot, however, be used with the VIAspire Liquefier. This inserts applies to the following Inspired Technologies part numbers:

300P-0601 and 600P-0601

All the pages in the VIAspire Oxygen Portable 300 and 600 Product Manual still apply except for the following:

Page 1: The portables with the PB Coupler are not compatible with the VIAspire Liquefier. Another source of LOX is required.

Pages 7-10: Filling a VIAspire Portable 300 or 600. These directions are not applicable because the Portable will be filled from another liquid oxygen system, not the VIAspire Liquefier. Follow the instructions from the Liquid Oxygen System on filling a portable.

All terms, abbreviations and symbols, safeguards, cautions, warnings, notes, and Indications for Use in this manual still apply.

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